EUROPEAN PATENT APPLICATION

21 Application number: 87110878.3

(51) Int. Cl.4: F04B 49/00

2 Date of filing: 27.07.87

(12)

3 Priority: 04.08.86 US 892555

43 Date of publication of application: 10.02.88 Bulletin 88/06

Designated Contracting States:
BE DE GB NL SE

Date of deferred publication of the search report: 07.02.90 Bulletin 90/06

- Applicant: GENERAL SIGNAL CORPORATION PO Box 10010 High Ridge Park Stamford Connecticut 06904(US)
- Inventor: Bowden, Charles J.53 South FinlayBattlecreek Michigan(US)
- Representative: Baillie, lain Cameron et al c/o Ladas & Parry Isartorplatz 5 D-8000 München 2(DE)

(54) Flow control system for a hydraulic pump.

A hydraulic control system (10) having a supply of low pressure hydraulic fluid and a hydraulic pump (12) having a fluid inlet and a fluid outlet through which fluid is delivered at a high operating pressure

when the pump (12) is pumping at its capacity. A valve (16) is placed in fluid communication with the supply of hydraulic fluid (14) and the pump fluid inlet for permitting fluid communication between the supply of hydraulic fluid (14) and the pump fluid inlet when in one mode of operation and for substantially preventing fluid communication between the supply of hydraulic fluid and the pump fluid when in a second mode of operation. A control means prevents the valve (16) from assuming its second mode of operation until the magnitude of the pressure at the pump fluid outlet is below a predetermined pressure. The predetermined pressure is set to be substantially below the pump operating pressure. The valve (16) mounted in the fluid inlet is adapted to rotate therein from a first position in which fluid is free to flow through the fluid inlet to a second position in which the valve (16) substantially prevents the flow of fluid through the inlet. Hydraulically controlled means are provided for rotating the valve (16) back and forth between the first and second positions.

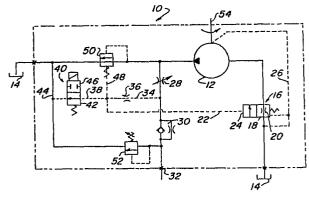


FIG. 1

EUROPEAN SEARCH REPORT

EP 87 11 0878

	DOCUMENTS CONSIDERE	D TO BE RELEVAN	T	EP 8/ 11 08/
Category	Citation of document with indication, of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
х	US-A-4237926 (WALKER) * column 1, line 51 - column 2	2, line 42; figure	1	F04B49/00
A	WO-A-8504455 (KARLMANN) * page 6, paragraph 4 - page 8 figure 1 *	3, paragraph 2;	1, 8	
A	US-A-4171188 (ANDERSON ET AL) * column 1, line 54 - column 1	3, line 12; figure	1, 6, 7	
A	US-A-3873239 (JAMIESON) * abstract *		1	
				TECHNICAL FIELDS SEARCHED (Int. Cl.4)
				F04B
	The present search report has been draw		<u> </u>	
	Place of search THE HAGUE	Date of completion of the search O6 DECEMBER 1989	vor	Examiner N ARX H.P.
THE HAGUE CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document		